BadgerCare Plus
Policy Implementation Center
Department of Health and Family Services
May 5, 2006

LITERATURE REVIEW OF CROWD-OUT IN MEDICAL ASSISTANCE, SCHIP, AND PREMIUM ASSISTANCE PROGRAMS

Overview

Expansion of government funded health coverage programs raises many policy concerns, including crowd out of private insurance. To the extent that Medicaid is viewed as a substitute for private insurance, crowd out remains important policy issue as it reduces the effectiveness of government expenditures. Money that goes toward subsidizing previously insured persons by a private market becomes unavailable to reduce the number of uninsured, the targeted group of expansions.

In general, three major crowd out pathways are possible:

- an individual or family drops private coverage for public coverage
- an enrollee in a public program refuses an offer of private coverage
- employers take actions that force or encourage employees to drop their coverage in favor of public program.

Private health insurance coverage is a dynamic process. Decreases in rate of coverage offered cannot be attributed to crowd out alone. Effects of business cycles, changes in employer's decision to offer coverage, changes in affordability of that coverage and shifts in the importance that employees place on having health insurance influence the rates of private coverage. The share of Americans without health insurance rose over the 1990s, despite the relative prosperity of the decade. For example, in 2001, 76% of Wisconsin residents had their health insurance coverage provided by their employers. That number is now down to 69%[1]. Research shows that rising premiums account for half of the decline in health insurance coverage.[2] The acceptability of public coverage also changes over time, which may make enrollment in public programs a more attractive option. In addition, some researchers argue that the availability of uncompensated care leads to greater losses of insurance coverage when premiums rise.[3]

Under the State Children's Health Insurance Program (SCHIP) enacted in 1997, states expanded eligibility so that nearly all uninsured children in families with income below 200% of the federal poverty level (FPL) are eligible for public coverage. A number of studies have attempted to estimate crowd out effects, in many cases analyzing the Medicaid expansions for children and pregnant women, however, the results of studies were different due to different assumptions, sources of data, and control groups.

[1] Current Population Survey, Census Bureau
[2] Chernew, Cutler, Keenan 2005.
[3] Ibid.

Studies

The first major undertake to measure crowd out of private insurance was done by D.M. Cutler and J. Gruber in a study called "Does Public Insurance Crowd Out Private Insurance" (1996). The study used SIPP[4] data from 1988 to1993 and analyzed crowd out in three ways: (a) the decrease in private coverage as a share of the individuals who become eligible for Medicaid after the expansion, (b) the decrease in private coverage as a share of total increase in Medicaid enrollment, and (c) the percentage decline of private coverage over time that could be attributed to Medicaid enrollment. Crowd out estimates were at 50%, 22% and 15% respectively. The lower estimates account for factors other than Medicaid that have effect on decision to shift from private to public coverage. A recent study by J.C. Ham and L. Shore-Sheppard[5] attempted to replicate the results obtained by Cutler and Gruber using CPS[6] data set for the same time period and found smaller but still statistically significant take up rates for Medicaid, but no evidence of crowd out. The study also found that children with a larger fraction of their siblings eligible for programs are more likely to be enrolled. Also, study results indicated that there is a significant delay in enrollment following eligibility onset.

Another study[7] used CPS data and focused on two different populations: children from families with incomes below 100% of FPL and children from families between 100% and 133% of FPL. The control group consisted of men ages from 18 to 44 in each of those income groups. The researches estimated that, of the total population who enrolled in Medicaid during the study period, 14% of pregnant women and 17% of children had been eligible for private insurance. However, crowd out estimates were higher for enrollees with income above 100% of FPL: 45% for pregnant women and 21% for children. Later research[8] noted that the control group of men may be problematic since men and women have different enrollment rates in Medicaid.

One study[9] examined firm-level responses to the Medicaid expansions. The study used national firm level data over the period from 1989 to 1995 collected using phone surveys. The authors found no evidence that the expansion of Medicaid affected employer offers of insurance to workers. However, the results indicated a negative relationship between the fraction of a firm's workers eligible for Medicaid and the probability a firm would offer coverage to workers' dependents. The study notes that there is not much data to analyze what goes inside firms with respect to health insurance (for example, how employee preferences are aggregated and how firm decisions respond to changes in those preferences).

[4] SIPP = Survey of Income and Program Participation, Longitudinal data, respondents are followed over time
[5] "The Effect of Medicaid Expansions for Low-Income Children on Medicaid Participation and Private insurance Coverage: Evidence from the SIPP" Journal of Public Economic 89 (2005)
[6] CSP = Current Population Survey, Cross-Sectional data, sample of respondents changes each year
[7] Dubay, Kenney study as cited in Altera's summary
[8] Yazici, Kaestner 1998
[9] Shore-Sheppard, Buchmuller, Jensen 2000

R. Kronick, T. Gilmer compared Minnesota, Washington, Oregon, and Tennessee in a study called "Insuring Low-Income Adults: Does Public Coverage Crowd Out Private?" The authors studied public health insurance expansions in 1990's and their effects in those four states. They concluded that for families with incomes below 100% of FPL public coverage reduced the number of uninsured, however, among persons with income between 100% and 200% of FPL, public coverage reduced the number of uninsured and crowded out some private insurance. The authors write that they expected more crowding out as the programs expanded to persons with higher income, primarily because there is more private insurance available to crowd out. The study notes that the state programs of subsidized insurance are not perceived as "permanent" because such programs are not entitlement programs and, therefore, employers and employees would be less willing to give up private insurance in favor of public coverage if that coverage might not be available in the future. The study found that TennCare and MinnesotaCare had more explicit protections against crowding out than Oregon and Washington programs did, however, Tennessee and Minnesota have experienced greater amounts of crowding out. The authors did not have "a convincing explanation" for these results, but the difference might be in the amount of outreach, the state of economy, and targeted populations of the expansion.

S. K. Long, S. Zuckerman, J. A. Graves in the study "Are Adults Benefiting from State Coverage Expansions?" compared California, Massachusetts, New Jersey, and Wisconsin Medicaid program expansions in 1997-2002. They used the following approach to measure crowd-out: the reduction in private coverage as a result of the expansion divided by the increase in public coverage as a result of expansion, times 100. To control for underlying trends in insurance coverage not related to the eligibility expansions, three control groups were used.[10] The primary source of data for this study was the National Survey of America's Families (NSAF), which oversamples low-income households and provides data before and after the implementation of the public program expansions. In all studied states, public coverage rates increased significantly, however, the uninsured rate decreased significantly only in Wisconsin and Massachusetts. In New Jersey, the study found strong evidence of crowd out, the increase in public coverage equaled decrease in private insurance. The study found strong evidence that in Wisconsin the increase in public coverage was largely due to a decline in uninsurance. The evidence from California and Massachusetts were mixed as some results were not statistically significant. The authors do not explain why they think New Jersey experienced crowd-out and Wisconsin did not. They do point out that rebranding of programs (BadgerCare in Wisconsin, FamilyCare in New Jersey, MassHealth in Massachusetts) contributed to higher enrolment numbers. Also, policies beyond program eligibility are important factors. For example, Massachusetts implemented premium assistance program at the same time as it expanded Medicaid program so it helped people to remain covered by an employer sponsored health insurance plan; New Jersey waived waiting periods for parents enrolled in non-group or COBRA insurance.

[10] Group 1 – parents in the same state with incomes just above the income cutoff for public program eligibility. Group 2 – childless adults in the same state with income below the income cutoff for eligibility for parents. Group 3 – parents in other states who would have been eligible if they have lived in that state.

As demonstrated by a number of studies, researchers define crowd out in many ways, depending on their perspective and available data. The most common approach is to compare the reduction in the share of the population with private coverage to the increase in the share of the population with public coverage due to the expansion. A less restrictive definition focuses on the amount of crowd out that occurs throughout the public program expansion, not just among the newly eligible population. Some studies focus on the extent to which program expansions reduce the number of uninsured. There are so called "broad" and "narrow" definitions of crowd out to measure decrease of the uninsured. The broad definition focuses on how far increases in public coverage have reduced the uninsured rate in the target population. The narrow definition focuses on whether private insurance rates have dropped in the target population as a result of the expansion of the public program. The hypothetical example[11] illustrates the difference in definitions:

	Change in % w/ public coverage only	Change in % w/ private coverage only	Change in % w/ public and private coverage only	Change in % of uninsured	Net Change
Hypothetical example	+ 5%	- 2%	+ 1%	- 4%	
Narrow definition					
Numerator		- 2%	+ 1%		- 1%
Denominator	+ 5%		+ 1%		+ 6%
Broad definition					
Numerator	+ 5%		+ 1%	- 4%	+ 2%
Denominator	+ 5%		+ 1%		+ 6%

Crowd out defined narrowly:

$$\frac{\text{(change in \% w/ private coverage only) + (change in \% w/ public and private coverage)}}{\text{(change in \% w/ public coverage only) + (change in \% w/ public and private coverage)}}$$

= (-2% + 1%) / (+5% + 1%) = - 1/6 = **16.7%**

Crowd out defined broadly:

$$\frac{\text{(change in \% w/ public coverage) + (change in \% w/ public and private coverage) + (change in \% uninsured)}}{\text{(change in \% w/ public coverage only) + (change in \% w/ public and private coverage)}}$$

=(+5% + 1% - 4%) / (+5% + 1%) = 2/6 = **33.3%**

[11] Adopted from Davidson, Blewett, Call, SHADAC, The Synthesis Project 2004

Implications

Although crowd out has been examined for three major public program expansions (Medicaid expansion in earlier '90s, SCHIP programs, and state initiated coverage expansions in late '90s), measuring the crowd out effects remains difficult for several reasons:

(1) employment based insurance coverage changes due to effects in business cycles, affordability, and importance employers and employees place on having coverage,
(2) no ideal method exists to estimate crowd out effect, and
(3) not all changes in coverage is crowd out (for example, loss of coverage through employment after a divorce).

Factors that influence the extent of crowd out:

- Crowd out is more likely at higher levels of income (higher than 200% FPL)
- Higher rates of substitution, but not necessarily more crowd out, are likely among families who experience a large drop in income[12]
- The state of economy
- Employers decision to drop coverage in response to public program expansion[13]
- Allowing whole families to enroll in public programs may increase crowd out
- Generous benefits of public coverage

Mechanisms that states have used to prevent crowd-out:

Direct strategies to motivate enrollee and employer behavior:

- periods of uninsurance (also known as waiting periods), in which applicant must be uninsured for a period of time – usually three to six months – before enrolling in premium assistance program;
- Cost sharing, which can be made similar to the one required by private insurance, to deter coverage substitution;
- Minimum contribution levels toward coverage from participating employers to prevent them from lowering their contributions.
- State law to prevent employers from altering their coverage in response to public programs. For example, employers who drop coverage for their employee could be excluded from participating in a premium assistance program for a specified period of time;
- Establishing purchasing cooperatives for small businesses so they can provide their employees with coverage;
- Subsidizing employees to make premiums for group coverage more affordable.

[12] Yazici, Kaestner 1998 – study used longitudinal data to track children's insurance coverage over time and found children who became eligible for Medicaid through a significant drop in family income had the highest rate of public program substitution among the groups of children studied.
[13] Research suggests it is more likely that small, low wage firms (those with under 100 employees, paying up to $15/hour) would reduce coverage for dependents.

Indirect strategies to retain private insurance:

- Monitoring - states tracks current and prior insurance status, usually by including questions on the application form;
- Verifying whether applicants are uninsured by accessing private insurance databases.

Research and experience by states suggest that there is no single policy to prevent crowd out of private insurance. Rather a mix of policies, both direct and indirect, should be considered. For example, waiting periods alone seem unlikely to have major impact on crowd out for the following reasons: enforcement is difficult and costly, some families drop their private coverage and wait out the required period, public program enrollees may not take up the private insurance even if it is offered, and waiting periods have exceptions (usually for special needs populations).

The rules of crowd out sometimes may act as barriers for low income people to enroll into public programs. Cost sharing is a prime example. Many states have sliding scale premium contributions that rise to significant dollar amount at the upper limit of income eligibility and make public coverage less attractive. Income thresholds at which states begin applying cost sharing vary, as well as amounts imposed and administrative rules. Even though cost sharing became a common practice, some surveys and focus groups indicate that even a $1 or $3 co-payment is difficult to come up with for a very low income family.

Movement from private to publicly funded coverage is not necessarily a policy failure, however, the overall rate of health insurance coverage will not increase as much as expected. Trade-offs between expanding coverage and reducing crowd-out should be considered:

- crowd out raises the costs of expanding coverage;
- monitoring crowd-out provides imprecise information and implementing deterrents may be costly;
- attempts to reduce crowd out can limit participation by other groups;
- people who shift from private to public coverage may obtain better benefits;
- effective targeting raises equity concerns.

In summary, crowd out has important implications for the cost, efficiency and effectiveness of a public program expansion. The review of literature presents conflicting estimates and suggests that there is no single answer. A review of studies and other state policies could serve as a starting point for the discussion about the BadgerCare Plus and prevention of crowd out.

Other States

Crowd out protections in the early 1990s[14]:

State/Program	Crowd-out protections
Minnesota: MinnesotaCare	Ineligible if insured during 4 months prior to application; ineligible if employer offers coverage and pays at least 50% of premium; ineligible if employer dropped coverage in previous 18 months.
Oregon: Oregon Health Plan	No explicit restrictions on prior coverage; publicity about services "below the line" and rationing might have led to reluctance to drop private coverage.
Tennessee: TennCare	Ineligible if offered employer-sponsored insurance.
Washington: Basic Health Plan	No explicit restrictions; 3 month preexisting condition exclusion.

Premium Assistance program is also one of the ways to limit crowd out of Medicaid. However, the design of Premium Assistance program itself should consider ways to limit crowding out of private insurance.

Crowd out protections by states that have Premium Assistance programs[15]:

State/Program	Crowd-out protections
Maryland	To avoid crowd out, the state will not enroll any individual who is covered or who has voluntarily refused or terminated employer-sponsored health insurance within the preceding six months. Employers participating in the program must pay at least 50% of family coverage.
Mississippi	The plan imposes a six month period of not being insured for enrollment into the premium assistance program. Employers must contribute at least 50% of the cost of the employer-based coverage.
Massachusetts	The employer must pay at least 50% of the health insurance cost.
Virginia	The child must be uninsured for six months and the employer must contribute at least 40%.
New Jersey	The employer must pay 50% of the cost of the program and the parents and children must be uninsured and meet a six month waiting period requirement. Exceptions for a look back period include a loss of job, divorce, or death of covered family member.

[14] Kronick, Gilmer 2002
[15] Etwart 2002 Appendix A

Current crowd out protection policies in MA, SCHIP programs:

State/Program	Crowd-out protections
Arkansas	Arkansas offers a limited benefit package, requires cost sharing ($100 deductible, 15% coinsurance for all services except pharmacy, $1,000 max out of pocket per year, premiums not to exceed $15/month). Employers will be eligible to participate in the program if they have not offered group health insurance in the past 12 months. Participating employers will be required by the state to achieve 100% employee health insurance coverage. The state's goal for reducing the uninsured rate is 4% in phase 1 (Oct 2006).
Illinois	Illinois All Kids program is set to start July 1, 2006. The program aims to cover an estimated 253,000 Illinois children who lack health insurance because their families earn too much to qualify for Medicaid or SCHIP, but too little to able to afford policies in the private sector. The monthly premiums start at $15 and are higher for higher income families. The state estimates that the first year the coverage will be extended to 50,000 children at a cost of $45 million. All Kids program will pay Medicaid fee-for-service rates to providers. Such payment structure "has engendered considerable skepticism in the physician world," according to Dr. Craig Backs, president of the Illinois State Medical Society. In an effort to avoid crowd out, All Kids initially will require that enrollees have been uninsured for at least six months. That uninsured period will eventually be lengthened to a year. The program is open to all kids under 19, including undocumented children and state employee's children. Illinois goal seems to be broad awareness of the program that would help to enroll more people in Medicaid and SCHIP once they come to apply for All Kids program.
West Virginia	The SCHIP eligibility is expanded from 200 to 300% of FPL. It is estimated that the expansion will increase the number of children who can be enrolled in SCHIP by up to 4,300. There is also a pilot program for providing clinic-based primary care services to the uninsured for a prepaid fee. An Interagency Health Council will study how to move the state toward universal health coverage.
Los Angeles Healthy Kids	Cost sharing was included in Healthy Kids to promote personal responsibility and because designers wanted to create a program that was modeled after private insurance. A 3 month waiting period for any families that possess insurance for their children at the time of application was included. Key informants that were interviewed by the Urban Institute reported that it is extremely rare to encounter a parent that has any job-based health insurance.
Texas	Crowd out protection includes monitoring, waiting period of three months, co-payments (not to exceed 1.25% or 2.5% of family's income). The state study found that 1% of newly enrolled children in the state's SCHIP program dropped private coverage to be enrolled in the public program.

References

Alteras, T. T. “Understanding the Dynamics of “Crowd Out”: Defining Public/Private Coverage Substitution for Policy and Research” *Academy for Health Services Research and Health Policy* 2001

Bundorf, M.K., Pauly, M.V. “Is Health Insurance Affordable for the Uninsured?” *National Bureau of Economic Research* 2002

Chernew, M., Cutler, D.M., Keenan, P.S. “Increasing Health Insurance Costs and the Decline in Insurance Coverage” *Health Services Research* 40:4 2005

Cutler, D.M., Gruber, J. “Does Public Insurance Crowd Out Private Insurance” *The Quarterly Journal of Economics* Vol. 111 No. 2 1996

Davidson, G., Blewett, L.A., Call, K.T., State Health Access Data Assistance Center “Public Program Crowd Out of Private Coverage: What Are the Issues?” *The Synthesis Project* 2004

Etwart , L. “Premium Assistance Programs: Reducing the Number of Uninsured Working Texans with Low to Moderate Incomes” 2002 Appendix A

Gruber, J. Levitt, L. “Tax Subsidies for Health Insurance: Costs and Benefits” *Health Affairs* Vol. 19, Nr. 1 2000

Ham, J.C., Shore-Sheppard, L. “The Effect of Medicaid Expansions for Low-Income Children on Medicaid Participation and Private Insurance Coverage: Evidence from the SIPP” *Journal of Public Economics* Vol. 89 2005

Hill, I., Courtot, B., Wada, E. “A Healthy Start for Los Angeles Healthy Kids Program” *Urban Institute report*

Kronick, R., Gilmer, T. “Insuring Low-Income Adults: Does Public Coverage Crowd Out Private?” *Health Affairs* Jan/Feb 2002

Long, K., Zuckerman, S., Graves, J.A. “Are Adults Benefiting form State Coverage Expansions?” *Health Affairs Web Exclusive* 2006

Shore-Sheppar, L., Buchmuller, T., Jensen, G.A. “Medicaid and Crowding Out of Private Insurance: a Re-examination Using Firm Level Data” *Journal of Health Economics* Vol. 19 2000

Yazici, E.Y., Kaestner, R. “Medicaid Expansions and the Crowding Out of Private Health Insurance” *National Bureau of Economic Research* 1998

"Illinois Sets its Sights on Covering All Kids" *In Depth* State Health Notes Vol. 27 Issue 464 April 3, 2006

National Bureau of Economic Research *Reporter* "Health Care" Spring 2006

"The Impact of the Children's Health Initiative (CHI) of Santa Clara County on Medi-Cal and Health Families Enrollment" *Mathematica Policy Research* 2004